

CLAIMS

WHAT IS CLAIMED IS:

- 5 1. A carbonated beverage package comprising:
- (a) a metal can body having an open upper extremity and including a sidewall with an inner surface, an outer surface and an annular upper edge portion at said upper extremity;
- 10 (b) a body of a carbonated beverage contained within the can; and
- (c) a can lid having an upper surface, a lower surface and an annular peripheral portion secured to the upper edge portion of the sidewall along an annular seam, the lid being upwardly domed by positive internal pressure caused by the carbonated beverage within the can, the lid defining an aperture therein for pouring or drinking liquid from the can, and further including a flexible closure member extending entirely over the aperture and peelably bonded to the upper surface of the lid;
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wherein the improvement comprises, in combination,

- (d) the upper edge portion of the sidewall being formed into an outwardly projecting annular flange with an upper surface that is continuous with the inner surface of the sidewall, the sidewall being formed with a reduced-diameter neck immediately below the annular flange;
- 25 (e) the annular peripheral lid portion overlying the annular flange and having no return bend;
- 30 (f) the lower surface of the lid at said annular peripheral portion facing and being adhesively bonded to the upper surface of the annular flange; and
- (g) the seam including a metal member extending around the annular peripheral lid portion and bearing against the upper surface of the lid to hold the annular peripheral lid portion and the annular flange together.
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2. A package as defined in claim 1, wherein the seam extends outwardly and substantially horizontally or downwardly from the sidewall.

5 3. A container including:

(a) a metal container body having an open upper extremity and including a sidewall with an inner surface, an outer surface and an annular upper edge portion at said upper extremity; and

10 (b) a metal lid having an upper surface, a lower surface and an annular peripheral portion secured to the upper edge portion of the sidewall along an annular seam;

wherein the improvement comprises, in combination,

(c) the upper edge portion of the sidewall being formed into an outwardly projecting annular flange with an upper surface that is continuous with the inner surface of the sidewall, the sidewall being formed with a reduced-diameter neck immediately below the annular flange;

20 (d) the annular peripheral lid portion overlying the annular flange and having no return bend;

(e) the lower surface of the lid at said annular peripheral portion facing the upper surface of the annular flange; and

25 (f) the seam including a metal member holding the annular peripheral lid portion and the annular flange together.

30 4. A container as defined in claim 3, wherein the lower surface of the lid at said annular peripheral portion is adhesively bonded to the upper surface of the annular flange, and the metal seam member comprises a metal member extending around the annular peripheral lid portion and bearing against the upper surface of the lid to hold the annular peripheral lid portion and
35 the annular flange together.

5. A container as defined in claim 4, wherein the metal seam member comprises an integral outer portion of the annular flange extending beyond the annular peripheral lid portion, formed with a return bend to overlie the annular peripheral lid portion of the lid and crimped to hold the lid against the flange.

6. A container as defined in claim 4, wherein the metal seam member comprises an inwardly opening U-shaped metal ring formed around and gripping the annular peripheral lid portion and the annular flange to hold them together.

7. A container as defined in claim 4, wherein the lid is upwardly domed by positive internal pressure within the container.

8. A container as defined in claim 3, wherein the seam extends outwardly and substantially horizontally or downwardly from the sidewall.

9. A container as defined in claim 7, comprising a can, said body being a can body, wherein the lid defines an aperture for discharging the contents of the container, and further including a flexible closure member extending entirely over the aperture and peelably bonded to the upper surface of the lid.

10. A container as defined in claim 9, wherein the metal seam member comprises an integral outer portion of the annular flange extending beyond the annular peripheral lid portion, formed with a return bend to overlie the annular peripheral lid portion of the lid and crimped to hold the lid against the flange; and wherein the sidewall extends generally vertically and the seam is bent so as to project generally upwardly from the neck.

11. A container comprising

- (a) a generally axially vertical container body including an open upper extremity and a metal sidewall with an outwardly projecting annular upper portion having an extended surface, the sidewall being formed with a reduced-diameter neck immediately below the outwardly projecting annular portion; and
- (b) a metal top structure including an outwardly projecting annular portion with an extended surface in juxtaposed facing relation to said extended surface of the annular upper portion of the sidewall, the annular portion of the top structure being secured to the annular upper portion of the sidewall along an annular seam extending outwardly and substantially horizontally or downwardly from the sidewall;
- (c) the seam including a metal seam member holding the annular portion of the top structure and the annular upper portion of the sidewall together.

12. A container as defined in claim 11, wherein the juxtaposed extended surfaces of the annular portions of the sidewall and the top structure are adhesively bonded together.

13. A container as defined in claim 11, wherein the metal seam member comprises a region of the annular portion of the sidewall that is welded to the annular portion of the top structure.

14. A container as defined in claim 11, wherein the metal seam member comprises an integral outer part of the annular portion of the sidewall, formed with a return bend to extend around the annular portion of the top structure and crimped to hold the annular portion of the top structure against the annular portion of the top structure.

15. A container as defined in claim 14, wherein the metal seam member has an inwardly curled outer edge.

16. A container as defined in claim 11, wherein the metal seam member comprises an inwardly opening U-shaped metal ring formed around and gripping the annular portions of the sidewall and the top structure to hold them together.

17. A container as defined in claim 16, wherein the metal ring has an inwardly curled outer edge.

18. A container as defined in claim 11, wherein the metal top structure has an aperture formed therein.

19. A container as defined in claim 11, wherein said outwardly projecting annular portion of the top structure is the lowermost portion of the top structure.

20. A method of producing a can containing a carbonated beverage, comprising:

- (a) filling, with a carbonated beverage, a metal can body having an open upper extremity and including a sidewall with an inner surface, an outer surface and an annular upper edge portion at said upper extremity, said upper edge portion being formed into an outwardly projecting annular flange with an upper surface that is continuous with the inner surface of the sidewall and the sidewall being formed with a reduced-diameter neck immediately below the annular flange;
- (b) disposing, in overlying relation to the annular flange, a can lid having an upper surface, a lower surface and an annular peripheral portion, the lid defining an aperture therein for pouring or drinking liquid from the can, and further including a flexible closure member extending entirely over the aperture and peelably bonded to the upper surface of the lid;
- (c) adhesively bonding the lower surface of the lid at said annular peripheral portion to the upper surface of the annular flange; and

- (c) adhesively bonding the lower surface of the lid at said annular peripheral portion to the upper surface of the annular flange; and
- (d) forming a metal member to extend around the annular peripheral lid portion and bear against the upper surface of the lid to hold the annular peripheral lid portion and the annular flange together, with the annular peripheral lid portion having no return bend.

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